

LSRL practice worksheet answers:

1) negative, linear, moderately strong

2) yes- plot is linear, and we have a high correlation

3) $y = 260.5639 - 22.9688x$

heart = $260.5639 - 22.9688(\text{wine})$

6) deaths per 100,000 people / liter

7) For every 1 liter increase in the wine consumption of a country, the deaths decrease by 22.9688 per 100,000 people.

8) heart = 164.095 deaths per 100,000 people

9) $173 - 164.095 = 8.905$ underestimate

10) -90.8587 deaths per 100,000 people. NOT confident!
because this is extrapolation

$$11) r^2 = 0.7103$$

71.03% of the change in the heart disease death rate is due to the change in the in wine consumption.

$$1) \widehat{\text{policies}} = -1.7425 + 0.5497(\text{minutes})$$

$$2) \widehat{\text{minutes}} = 7.9564 + 1.4203(\text{policies})$$

$$b_1 = r \left(\frac{s_y}{s_x} \right)$$

$$b_0 = \bar{y} - b_1 \bar{x}$$

